Application No.: 10/589,953

Office Action Dated: December 28, 2009 Reply to Office Action Dated: March 29, 2010

#### **REMARKS**

Claims 1-10 are pending in the present application. Claim 1 has been amended. Support for the amendment to claim 1 is found in the specification, for example page 1 and original claim 1.

Reexamination of the application and reconsideration of the rejections and objections are respectfully requested in view of the above amendments and the following remarks, which follow the order set forth in the Office Action.

## Information Disclosure Statement

Applicants request that the Examiner consider the references cited in the IDS dated July 24, 2007 and that initialed PTO/SB/08A form of the same sent to the Applicants. Applicants have submitted to the Office two information disclosure statements dated September 27, 2006 and July 24, 2007. The two IDS filings together list six references some of which are foreign language documents having English language abstracts. Each of six references disclosed in the two statements was cited in the International Search Report of the parent PCT application. Enclosed herein with are copies of the International Search Report and the International Preliminary Report on Patentability (attached as Exhibit A) issued to the parent PCT application. Accordingly, the references should be considered.

### Co-pending Applications

Applicants bring to the Examiner's attention U.S. Patent Application Nos: 12/522,209, filed July 6, 2009 and published as U.S. Patent Application Publication No. US 2009-0318291 A1 on December 24, 2009; and 12/528,700, filed August 26, 2009, not yet published, which cover subject matter related to the claims of the present application.

### Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1-10 under 35 USC 103(a) over EP0141317 (corresponding to U.S. Patent No. 4,617,303 ("Eicken")), WO 03/009687 (corresponding to CA 2,454,542 ("Stierl")), and EP 215 382 (corresponding to CA 1,288,096 ("Herman")). Applicants traverse the rejection.

According to the office action, the pending claims differ from the references in that they are of different scope and that "indiscriminate selection of 'some' from 'many' is considered prima facie obvious." Office action, page 5. The office action further alleges that the "claimed compounds would have been obvious because one skilled in the art would

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have been motivated to prepare compounds embraced by the genus of the above cited references with the expectation of obtaining additional beneficial compounds." *Id*.

The current claims are directed to a subgenus and species not disclosed specifically in *Eicken*. *Eicken* discloses triazolopyrimidine compounds with R<sup>1</sup> being alkyl or alkoxysubstituted alkyl and R<sup>2</sup> being C<sub>1</sub>-C<sub>4</sub> alkyl. By contrast, the specific design of the variables R<sup>1</sup> being C<sub>5</sub>-C<sub>12</sub>-alkyl or C<sub>5</sub>-C<sub>14</sub>-alkoxyalkyl and R<sup>2</sup> being ethyl, isopropyl, cyclopropyl, CH=CH<sub>2</sub> or CH<sub>2</sub>CH=CH<sub>2</sub> of the claimed compounds of formula I yield an unexpected improvement in fungicidal activity.

Applicants conducted comparative trials to compare the fungicidal activity of some novel compounds with structurally similar compounds which are known from *Eicken*. Attached as Exhibit B is a declaration by inventor Dr. Egon Haden. The declaration compares compounds that differ only in the structural feature R<sup>2</sup>. From the data, it is evident that the increased activity of the claimed compounds is attributable to the inventive structural feature. The compounds according to the current copounds in which R<sup>2</sup> is as defined in claim 1 are significantly more effective than compounds disclosed in *Eicken*. The skilled artisan would not expect replacing a methyl or propyl group with an ethyl group, isopropyl group or CH<sub>2</sub>CH=CH<sub>2</sub> as the R<sup>2</sup> substituent would lead to a significantly broadened spectrum of activity and an increase of the fungicidal activity. Thus, the skilled artisan would not have been motivated to prepare the instantly claimed compounds as there is no reason to believe that they would have superior fungicides with a widened biological spectrum. Consequently, the claimed subgenus is not rendered obvious by the disclosure of *Eicken*.

Stierl fails to disclose or suggest the claimed compounds. Stierl discloses compound having formula

wherein "X is halogen, cyano, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-haloalky, phenyl, or R<sup>a</sup>-substituted phenyl." *Stierl*, page 2. In the claimed the group corresponding to X of *Stierl* is R<sup>2</sup>, which is defined in claim 1 as "CHR<sup>3</sup>CH<sub>3</sub>, cyclopropyl, CH=CH<sub>2</sub> or CH<sub>2</sub>CH=CH<sub>2</sub>; R<sup>3</sup> is hydrogen or CH<sub>3</sub>." See claim 1. Thus, the claimed compounds cannot be "embraced by the genus of [*Stierl*]" as the office action alleges. Indeed, the *Stierl* compounds do not even overlap with the claimed compounds. Considering the unexpected superior properties of the claimed

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compounds compared to the closest prior art (*Eicken*), the claimed compounds cannot be rendered obvious by the disclosure of *Stierl*.

Harmann also fails to disclose or suggest the claimed compounds. Harmann discloses compounds having formula

wherein R<sup>1</sup> is aryloxyalkoxyalkyl, alkoxyalkoxyalkyl, alkoxyalkoxyalkoxyalkyl or dimethylaminoalkyl. By contrast, the group corresponding to R<sup>1</sup> above in the claimed compounds is optionally substituted C<sub>5</sub>-C<sub>12</sub>alkyl or C<sub>5</sub>-C<sub>14</sub>alkoxyalky. Thus, the claimed compounds cannot be "embraced by the genus of [*Harmann*]" as the office action alleges. Indeed, *Harmann* is not as close to the claimed compounds as *Eichen*. As discussed above for *Eichen* and shown in the accompanying declaration by Dr. Egon Haden, Applicants' compounds are unexpectedly superior to the closest prior art and therefore are not obvious over *Harmann*. Applicants respectfully request withdrawal of the rejection.

The Examiner rejected claims 1-10 under 35 U.S.C. §103(a) as being obvious over GB1148629. Applicants traverse the rejection.

GB1148629 also fails to disclose or suggest the claimed compounds. GB1148629 discloses compounds of formula:

$$R_{2}-C$$

$$R_{1}-C$$

$$R_{1}-C$$

$$R_{1}-C$$

$$R_{2}-C$$

$$R_{3}$$

$$R_{2}-C$$

$$R_{4}-C$$

wherein each of R<sub>1</sub> and R<sub>2</sub> may be a C<sub>1</sub>-C<sub>4</sub> alkyl, R<sub>3</sub> may be amino, and R<sub>4</sub> may be H (see page 1, left column, lines 15-25). Applicants note that R<sup>1</sup> of the claimed compounds (corresponding to R<sub>2</sub> of the reference) does not cover a C<sub>1</sub>-C<sub>4</sub> alkyl. Thus, the claimed compounds do not overlap with the compounds of GB1148629 and they are merely homologues of the claimed compounds. As discussed above for *Eichen* and shown in the accompanying declaration, Applicants' compounds are unexpectedly superior to the closest prior art cited. The compounds claimed in which R<sup>2</sup> is as defined in claim 1 are significantly more effective than compounds disclosed in the closest prior art. The skilled artisan would not expect replacing a methyl or propyl group with an ethyl group, isopropyl group or

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CH<sub>2</sub>CH=CH<sub>2</sub> as the R<sup>2</sup> substituent would lead to a significantly broadened spectrum of activity and an increase of the fungicidal activity. Thus, the skilled artisan would not have been motivated to prepare the instantly compound claimed compounds as superior fungicides with a widened biological spectrum. As such, GB1148629 cannot render the claimed compounds obvious. Applicants respectfully request withdrawal of the rejection.

# Non-Statutory Obviousness-Type Double Patenting Rejections

The Examiner rejected claims 1-10 on the grounds of non-statutory obviousness-type double patenting over the claims of U.S. Patent Nos. 7,501,383 ("the '383 patent") and RE 32676 ("the '676 patent"). Applicants traverse the rejection.

Claim 1 of the '383 patent is directed to compounds having the formula

wherein R<sup>1</sup> may be C<sub>1</sub>-C<sub>10</sub> alkoxy-C<sub>1</sub>-C<sub>10</sub>alkyl and R<sup>2</sup> may be C<sub>5</sub>-C<sub>12</sub> alkyl. We note that R<sup>2</sup> of the claimed compounds is ethyl, isopropyl, cyclopropyl, CH=CH<sub>2</sub> or CH<sub>2</sub>CH=CH<sub>2</sub>. Thus, contrary to the office action's characterization of the claimed compounds, the claimed invention is not a selection invention of the '383 patent. Indeed, there is no overlap between the claimed compounds and the compounds of claim 1 of the '383 patent. Considering the unexpected superior properties of the claimed compounds compared to the closes prior art, the claimed compounds cannot be rendered obvious by the disclosure of the '383 patent. Withdrawal of the rejection is respectfully requested.

Claim 1 of the '676 patent is directed to compounds of formula

$$R^1$$
 $NH_2$ 
 $N$ 
 $N$ 
 $R^3$ 

wherein  $R^1$  may be  $C_7$ - $C_{18}$  alkyl,  $R^2$  may be  $C_1$ - $C_4$  alkyl,  $R^3$  may be hydrogen, and A may be N.

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Applicants note that the '676 patent is the reissue patent of *Eicken*. As discussed above for *Eicken*, the claims of the present application are not obvious over the '676 patent. Withdrawal of the rejection is respectfully requested.

The office action provisionally rejected claims 1-10 on the grounds of non-statutory obviousness-type double patenting against U.S. Patent Application Nos. 11/885,360 ("the '360 application") and 11/885,332 ("the '332 application"). Applicants note that the '360 and '332 applications were later-filed applications. Applicants respectfully request that the rejections be withdrawn in this application, which is the first-filed application. When the present claims are found allowable, the Examiner should assess whether the rejection could then be applied to the later-filed applications.

For the foregoing reasons, claims 1-10 are considered allowable. A Notice to this effect is respectfully requested. If any questions remain, the Examiner is invited to contact the undersigned at the number given below.

The Director is hereby authorized to charge any appropriate fees that may be required by this paper, and to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

BRINKS HOFER GILSON & LIONE

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